



## **Creating A Garden**

Performance Task

### **Introduction**

A local community center is looking for more ways to provide healthy foods for those in need. Fruits and vegetables can be grown in gardens both inside and outside. To grow and survive the fruits and vegetables have a variety of needs that must be met. If you want to create a garden full of healthy vegetables, you will need to learn more about what plants need in order to survive and grow. If the garden can succeed, it will provide people with foods to help keep them healthy.

### **Big Idea / Essential Questions**

#### **Big Idea**

- Living things depend on their habitat to meet their basic needs.
- Nutrition and eating habits impact a person's overall health and well-being.

#### **Essential Questions**

- What do living things need to survive?
- How and why do organisms interact with their environment?

### **G.R.A.S.P.**

#### **Goal**

Your goal is to create a garden that grows plants such as fruits and vegetables. For these plants to survive, you will need to create an environment that can help plants grow. If your garden is successful, people in your community will have many fruits and vegetables to eat.

#### **Role**

You are a volunteer at a community center. Your center wants to serve healthy food for people who are in need. You are going to create a garden to grow fruits and vegetables to donate to the community center.

#### **Audience**

Your audience is people who use the community center, and others who may want to build their own garden.

## Situation

A local community center is looking for more ways to provide healthy foods for those in need. Fruits and Vegetables can be grown in gardens both inside and outside. To grow and survive, all plants have a variety of needs that must be met. If the garden can succeed, it will supply people with foods to help keep them healthy.

## Products

### 1. Brochure

Create a brochure that helps people understand what plants need to grow and how the garden you create could meet these basic needs. You will also need to describe how the different parts of the garden actually help plants to grow and survive. Every garden has a food chain that helps it grow. What is a food chain and how does it help a garden grow? This brochure should include pictures and words describing the different parts of the garden and how each part of the garden helps plants survive and grow.

- • What do living things need to survive?
- What are the basic needs of plants and animals?
- What is a food chain and how does it help a garden grow?

### Brochure - Creating a Garden

Achievement Levels	1	2	3
<b>Creativity</b> (x1)	The brochure design is not very original or creative and does not use many pictures that connect to the topic.	The brochure design is somewhat original and creative using pictures that connect to the topic.	The brochure design is original and creative using excellent pictures that connect to the topic.
<b>Science</b> (x2)	Product demonstrates little understanding of what plants or animals need to survive and that living things depend on their environments.	Brochure includes some knowledge or understanding of what plants or animals need to survive and that living things depend on their environments.	Product demonstrates strong understanding of what plants or animals need to survive and that living things depend on their environments.
<b>Organization</b> (x1)	The brochure is not very well organized with information or details that support the topic.	The brochure is somewhat organized with information or details to support the topic.	The brochure is well organized with important information and details to support the topic.

### 2. Plant Study

You are going to grow a vegetable plant in your classroom. Before you decide on a vegetable you will want to think about the important things that this plant will need to grow.

- How much light does it need to grow?
- How much water does it need to grow?
- What kind of soil will be best for it to grow?
- What else should you think about to help your plant grow?
- What role will the roots play?
- In what ways will the stem support this plant?

During this plant study, make sure that you are recording your observations so you can discuss and compare with your classmates. Each week you will need to measure

your plants and record how tall they are. Make a chart to keep track of how much water or plant food you give your plant each day as well as how tall the plants are.

- What kinds of plants do you want to grow and why?
- How is this particular plant good for our bodies?
- What does this plant need in order to grow?
- Where will you put your plants in order to be able to grow in your classroom?
- How will you take care of your plants and keep track of their growth?
- How do plant parts support growth?
- How can you use a picture graph or bar graph to show your results?

## Plant Study-Creating A Garden

Achievement Levels	1	2	3
<b>Science</b> (x1)	Student does not show understanding of what plants need in order to grow.	Student shows some understanding of what plants need in order to grow.	Student shows excellent understanding of what plants need in order to grow.
<b>Chart Organization</b> (x1)	Student does not show an organized chart that represents observations during plant study.	Student includes some observations recorded in a chart.	Student shows excellent organization with valuable observations for the plant study.
<b>Creativity and Participation</b> (x1)	Student does not show much creative participation in the plant study project.	Student shows some creativity and actively participates in selecting a plant for the study.	Student shows creativity and actively participates in the selection and process for the plant study.
<b>Math-Measurement</b> (x1)	Student does use or show record of measurement.	Student utilizes some measurement skills and/or records data in order to keep track of plant growth.	Student shows excellent measurement skills and accurately records data to show plant growth.

## 3. Plant Growth Graph

Extension: Once your plant from the Plant Study has broken through the soil, you will need to record its height every week using a ruler. Keep a chart that shows the week number and the height in centimeters. After several weeks, you will use the data in your graph and make a bar chart of your plant's growth. Using this chart, answer the following questions:

- How much did the plant grow from the first to last week?
- Between which 2 weeks did the plant grow the most?
- Between which 2 weeks did the plant grow the least?

Make sure your graph is neat and has a title and all labels.

- How do you measure in centimeters?
- Where would you start on the ruler?
- How can you create a bar graph to show your plant's growth?